Credit Name: CSE 2140 2nd Language Programming
Assignment Name: GuessingGame Mastery
How has your program changed from planning to coding to now? Please explain?

PLANNING:

I planned to Declare the variables that will be used in the program, the prompt the user with the introduction messages introducing the program. Then a random number between 1-20 would be generated, and user would enter a random number 1-20. If the numbers matched, the program would congratulate the user, and if the numbers didn't match, a "try again" message would be displayed.

CODING:

1. The SecretNum and UserNum variables are declared, which store the values of the computer number and user number respectively. The Introduction messages are then displated, introducing the user to the purpose and use of this program/game. The scanner was also set to prepare for user inputs later in the program.

```java
//Declare the variables that will be used in the program
int SecrectNum = 0;
int UserNum = 0;

//Prompt user intro message
System.out.println("This program will generate a random number 1-20, and you will do the same.");
System.out.println("Your goal is to pick the same number as the program!");

// prepare scanner for userinputs later in program
Scanner input = new Scanner(System.in);
```

2. An instance of random class is created for use in randomly generating a number from 1-20.
The randomly generated number is then stored in the SecrectNum variable
The user is then prompted for an integer number from 1-20, and that value is stored in the UserNum variable.
The values of the Computer generated number and user input number are both printed.

```java
//Create an instance of Random class
Random random = new Random();

// declare variable to store the random value, and generate a random integer in range 1 to 20
SecrectNum = random.nextInt(20) +1;

//prompt user for a number 1-20:
System.out.println("Please enter a integer from 1-20:");
UserNum = input.nextInt();

//print the values of the computer randomly generated integer and the user input random integer
System.out.println("Computer's Number: " + SecrectNum);
System.out.println("User's Number: " + UserNum);
```

3. Finally, The program checks to see wether or not the user and program-generated numbers both match. Using an If statement, a congratulation message is displayed if the user and program-generated numbers are the same, and a "try again" message is displayed if the user and program-generated numbers are different.

```java
//program checks to see if user input and randomly generated number are the same
if (SecrectNum == UserNum) {
    System.out.println("Congrats! you won!");
}
else {
 System.out.println("Oops... Try Again!");
```

END of Program!